AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1. (currently amended) A process of preparing gold-coated magnetic nanoparticles comprising:

dispersing magnetic nanoparticles wherein said magnetic nanoparticles are of a magnetic material selected from the group consisting of the elements samarium, neodymium, compounds thereof and alloys thereof within a suitable liquid to form a suspension;

adding an amount of a reducible gold compound and a reducing agent to the suspension; and,

maintaining the suspension for time sufficient to form gold-coated magnetic nanoparticles wherein said gold coating is directly on said magnetic nanoparticles.

Claim 2. (cancelled)

Claim 3. (original) ~~The process of claim 1~~ A process of preparing gold-coated magnetic nanoparticles comprising:

dispersing magnetic nanoparticles [wherein said magnetic nanoparticles are] of samarium cobalt within a suitable liquid to form a suspension;

adding an amount of a reducible gold compound and a reducing agent to the suspension; and,

maintaining the suspension for time sufficient to form gold-coated magnetic nanoparticles wherein said gold coating is directly on said magnetic nanoparticles .

Claim 4. (original) The process of claim 1 wherein said reducible gold compound is selected from the group consisting of sodium tetrachloroaurate, sodium tetrabromoaurate, tetrachloroauric acid, tetrabromoauric acid, potassium tetrachloroaurate, and potassium tetrabromoaurate.

Claim 5. (original) The process of claim 1 wherein said reducing agent is selected from the group consisting of sodium citrate, sodium borohydride, white phosphorus, lithium aluminum hydride, and sodium cyanoborohydride.

Claim 6. (original) The process of claim 1 further including reacting said gold-coated magnetic nanoparticles with a mercapto-terminated bifunctional compound to form composite nanoparticles of a thiol-bound functional group-containing spacer group thereon said gold-coated magnetic nanoparticles.

Claim 7. (original) The process of claim 6 further including reacting said functional group upon said composite nanoparticles with a linker group having one terminally protected functionality.

Claim 8. (original) The process of claim 6 wherein said mercapto-terminated bifunctional compound includes as a functionality selected from the group consisting of carboxylic acid, amine, sulfhydryl, phosphate, phosphonate hydroxyl, alkenyl, and alkyne.

Claim 9. (original) The process of claim 7 wherein said linker group having one terminally protected functionality is selected from the group consisting of Fmoc-ethylenediamine, ethylene glycols, propylene glycols, cysteamines and homologues thereof.

Claim 10. (original) The process of claim 7 wherein said linker group having one terminally protected functionality is Fmoc-ethylenediamine.

Claim 11. (original) The process of claim 6 further including de-protecting the one terminally protected functionality and reacting said functionality with a recognition group, a bioconjugative reactive moiety or a biologically active moiety.

Claims 12-16 (cancelled without prejudice).

Claim 17. (new) The process of claim 3 wherein said reducible gold compound is selected from the group consisting of sodium tetrachloroaurate, sodium tetrabromoaurate, tetrachloroauric acid, tetrabromoauric acid, potassium tetrachloroaurate, and potassium tetrabromoaurate.

Claim 18. (new) The process of claim 3 wherein said reducing agent is selected from the group consisting of sodium citrate, sodium borohydride, white phosphorus, lithium aluminum hydride, and sodium cyanoborohydride.

Claim 19. (new) The process of claim 3 further including reacting said gold-coated magnetic nanoparticles with a mercapto-terminated bifunctional compound to form composite nanoparticles of a thiol-bound functional group-containing spacer group thereon said gold-coated magnetic nanoparticles.